



Cisco TFTP

Cisco Trivial File Transfer Protocol (TFTP) is a Windows NT service that builds and serves files consistent with the TFTP protocol. TFTP is a simplified version of the FTP protocol. Cisco TFTP serves both Embedded Component Executable and configuration (.cnf) files.

A configuration file is a list of Cisco CallManagers to which devices (telephones and gateways) make connections. When a device boots, the component queries a Dynamic Host Configuration Protocol (DHCP) server for its network configuration information. The DHCP server responds with an IP address for the device, a subnet mask, a default gateway, a Domain Name System (DNS) server, and a TFTP server name or address.

The device requests a .cnf file from the TFTP server. The .cnf file contains a list of Cisco CallManagers and the TCP port to which the device connects to those Cisco CallManagers.

If the Cisco CallManager's name is received, the device resolves the name using Domain Name System (DNS) and a Cisco CallManager connection is opened. If neither an IP address or name is received, the default server name is used.

For more detailed TFTP information, refer to the following sections:

- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3

Use the following procedures to insert and delete TFTP service from a server, to configure and delete Command Line Parameters, and to configure and delete TFTP Trace Parameters:

- Inserting Cisco TFTP Service on a Server, page 28-2

- Deleting Cisco TFTP Service From a Server, page 28-3
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Configuring Cisco TFTP Trace Parameters, page 28-8

Inserting Cisco TFTP Service on a Server

This section describes how to insert Cisco TFTP service on a server.

Before You Begin

The following prerequisite must be met before proceeding with the steps. See the “Server” section on page 8-1.

- Servers must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > TFTP**.
- Step 3** Select a server on which to insert Cisco TFTP service from the drop-down menu and click **Insert**. (Servers listed on the left side of the page have already been configured with TFTP service.) The page refreshes, showing the server you selected.
- Step 4** Click **Insert**.
- The page refreshes again and the server you selected should now be configured with Cisco TFTP service.



Tips

Click **New** if you want to insert Cisco TFTP on another server. This takes you back to the first Cisco TFTP Configuration page.



Note You only need to configure Cisco TFTP service on one server in a network, unless you want to share loading of service.

Additional Information

The following list contains additional information related to this procedure:

- Cisco TFTP, page 28-1
- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3
- Cisco CallManager Group, page 10-1

Related Procedures

The following list contains other related procedures:

- Deleting Cisco TFTP Service From a Server, page 28-3
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Configuring Cisco TFTP Trace Parameters, page 28-8
- Adding a Cisco CallManager Group, page 10-2

Deleting Cisco TFTP Service From a Server

This section describes how to delete Cisco TFTP service from a server.

Before You Begin

The following prerequisite must be met before proceeding with the steps. See the “Server” section on page 8-1.

- Servers must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > TFTP**.
- Step 3** Select the server from which you want to delete Cisco TFTP service from the list of servers on the left side of the page. (Servers listed on the left side of the page have already been configured with Cisco TFTP service.) The page refreshes showing the information for the server you selected.
- Step 4** Click **Delete Service**. A message displays stating that you are about to permanently delete Cisco TFTP service from this server, and that the action can not be undone.
- Step 5** If you wish to continue this deletion, Click **OK**, otherwise click **Cancel**.
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Additional Information

The following list contains additional information related to this procedure:

- Cisco TFTP, page 28-1
- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3
- Cisco CallManager Group, page 10-1

Related Procedures

The following list contains other related procedures

- Inserting Cisco TFTP Service on a Server, page 28-2
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Configuring Cisco TFTP Trace Parameters, page 28-8
- Adding a Cisco CallManager Group, page 10-2

Configuring Cisco TFTP Command Line Parameters

This section describes how to configure Cisco TFTP command line parameters.

Before You Begin

The following prerequisite must be met before proceeding with the steps. See the “Server” section on page 8-1.

- Servers must be configured
- Read the “Understanding Service Parameters” section on page 7-1 for more information on service parameters.

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > TFTP**.
- Step 3** Select the server on which you want to configure command line parameters from either the drop-down menu, or the list of servers on the left side of the page. The page refreshes.
- Step 4** Click **Command Line Parameters** if it is not already selected.



Caution

Some changes to service parameters may cause system failure. We recommend you do not make any changes to service parameters unless you fully understand the feature that you are changing, or unless the changes are specified by the Cisco Technical Assistance Center (TAC). Refer to the “Understanding Service Parameters” section on page 7-1 for more information. You will probably never need to add parameters unless directed by the Cisco TAC.

- Step 5** Enter the name of the parameter you want to configure on this server in the Param field.
- Step 6** Enter the type of the parameter in the Type field, or choose a type from the drop-down menu.



Note The drop-down menu contains parameter types that have already been configured.

- Step 7** Enter a value for the parameter in the Value field.
- Step 8** Click **Update**. The page refreshes and your new service parameter appears in the Configured Service Parameters list at the bottom of the page.
- Step 9** Repeat Steps 1 through 8 to add additional service parameters.



Note If you would rather use the Cisco CallManager default service parameters, click **Default**. A message displays stating that you are about to permanently delete any previous settings and replace them with the default settings. Click **OK** if you wish to continue, or **Cancel** to keep the current settings.

Additional Information

The following list contains additional information related to this procedure:

- Cisco TFTP, page 28-1
- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3
- Cisco CallManager Group, page 10-1

Related Procedures

The following list contains other related procedures:

- Inserting Cisco TFTP Service on a Server, page 28-2
- Deleting Cisco TFTP Service From a Server, page 28-3
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Configuring Cisco TFTP Trace Parameters, page 28-8
- Adding a Cisco CallManager Group, page 10-2

Deleting Cisco TFTP Command Line Parameters

This section describes how to delete Cisco TFTP command line parameters.

Before You Begin

The following prerequisite must be met before proceeding with the steps. See the “Server” section on page 8-1.

- Servers must be configured
- Read the “Understanding Service Parameters” section on page 7-1 for more information about service parameters.



Caution

You will never need to delete parameters unless directed by the Cisco Technical Assistance Center (TAC).

Procedure

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- Step 1** Open Cisco CallManager Administration.
 - Step 2** Click **Service > TFTP**.
 - Step 3** Select the server from which you want to delete command line parameters from either the drop-down menu, or the list of servers on the left side of the page. Click **Insert**. The page refreshes.
 - Step 4** Click **Command Line Parameters** if it is not already selected.
 - Step 5** Highlight the service parameter you want to delete from the list of configured service parameters at the bottom of the page.
 - Step 6** Click **Delete**. A message displays stating that you are about to permanently delete this parameter, and that this action cannot be undone.
 - Step 7** Click **OK** if you wish to delete the parameter, or **Cancel** to cancel the deletion.
The parameter you deleted should no longer appear in the list of configured service parameters.
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Additional Information

The following list contains additional information related to this procedure:

- Cisco TFTP, page 28-1
- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3

Related Procedures

The following list contains other related procedures:

- Inserting Cisco TFTP Service on a Server, page 28-2
- Deleting Cisco TFTP Service From a Server, page 28-3
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Configuring Cisco TFTP Trace Parameters, page 28-8
- Adding a Cisco CallManager Group, page 10-2

Configuring Cisco TFTP Trace Parameters

This section describes how to configure Cisco TFTP trace parameters. For more detailed trace information refer to the “Trace” section on page 32-1.

Before You Begin

The following prerequisite must be met before proceeding with the steps. See the “Server” section on page 8-1.

- Servers must be configured
- Read the “Trace” section on page 32-1 before configuring trace parameters. This section provides detailed descriptions of trace levels and settings.

Procedure

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- Step 1** Open Cisco CallManager Administration.
 - Step 2** Click **Service > TFTP**.

- Step 3** Select the server on which you want to configure trace parameters from either the drop-down menu, or the list of servers on the left side of the page. Click **Insert**. The page refreshes.
- Step 4** Click **Trace**.
- Step 5** Select **Trace On** to enable trace. If Trace On is not selected, it is disabled and you will not be able to modify any trace properties.
- Step 6** Check each **User Mask** check box you want enabled. The user mask automatically appears in the Mask field. Click the **Show Time** check box if you want a time associated with the trace.
- Step 7** Select the level of trace you want from the **Level** drop-down menu. Click the **Show Date** check box if you want a date associated with the trace level.
- Step 8** Select the type of trace event alarms you want from the **Event** drop-down menu.



Note The level of trace event you want is determined by what you select from the drop-down menu. For instance, **DEBUG** is used for lab purposes and traces every event on the system, while **CRITICAL** only traces critical alarms.

- Step 9** Check the box of each trace component you want enabled.
- Step 10** When you have completed your trace parameter selections, click **Update**.



Note If you'd rather use the Cisco CallManager default settings, click **SetDefault**.

Additional Information

The following list contains additional information related to this procedure:

- Cisco TFTP, page 28-1
- Understanding DHCP and TFTP, page 6-2
- Understanding How Devices Identify the TFTP Server, page 6-3
- Adding a Cisco CallManager Group, page 10-2

Related Procedures

The following list contains other related procedures:

- Inserting Cisco TFTP Service on a Server, page 28-2
- Deleting Cisco TFTP Service From a Server, page 28-3
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Adding a Cisco CallManager Group, page 10-2